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ENERGY and OCEAN RESOURCES UNIT

Staff: SONGS Mitigation
Program Scientific Team,
JL and SMH—SF

Staff Report: July 21, 2006

Hearing Date: August 8, 2006

SAN ONOFRE NUCLEAR GENERATING STATION (SONGS) MITIGATION PROGRAM:

Executive Director's Determination that the Preliminary Mitigation Reef Plan Meets the Requirements of the SONGS CDP #6-81-330

Following is a report on the kelp reef mitigation requirements of Southern California Edison Company's (SCE) coastal development permit for the San Onofre Nuclear Generating Station (SONGS) Units 2 and 3 (permit no. 6-81-330-A, formerly 183-73). The purpose of this report is to present to the Commission for discussion and possible action the Executive Director's determination that the preliminary plan for the mitigation reef meets (1) the goals set forth in section 2.2 of the SONGS permit and (2) the specified criteria for the type of hard substrate and the percent cover of hard substrate that is required of the artificial reef to be constructed to mitigate for the loss of kelp forest habitat caused by SONGS operations. At the conclusion of the five-year independent monitoring of the experimental reef, the Executive Director determined the required design criteria for the mitigation reef, with Commission concurrence in October 2005. SCE then submitted this preliminary plan in compliance with the SONGS permit. Although the preliminary plan is consistent with the specified design criteria for the mitigation reef, the staff has some questions and concerns (provided to SCE in a July 11, 2006 letter, attached) to be addressed in the final plan. Following completion of the environmental analyses, SCE will submit the final reef mitigation plan in the form of a coastal development permit application for Commission action. We expect the permit application for the final reef plan within six to twelve months. *No formal Commission action is required at this time.*

SONGS Permit History

In 1974, the California Coastal Zone Conservation Commission issued a permit (No. 6-81-330-A, formerly 183-73) to Southern California Edison Company for Units 2 and 3 of the San Onofre Nuclear Generating Station (SONGS). A condition of the permit required independent scientific study of the impacts of the operation of Units 2 and 3 on the marine environment offshore from San Onofre, and mitigation of any adverse impacts. Long-term scientific studies conducted by the former independent Marine Review Committee (established by the Coastal Commission in 1974) concluded that the operation of SONGS Units 2 and 3 adversely impacts the San Onofre

kelp forest community. The SONGS coastal development permit was amended in 1989 to require Southern California Edison to mitigate this impact by constructing an artificial reef that will provide in-kind replacement for the loss of kelp forest habitat caused by SONGS' operations.

The overall goal of the SONGS artificial reef mitigation project is to compensate for the loss of kelp bed resources including giant kelp, understory algae, invertebrates, and fishes. The project is being done in two phases: a short-term, small-scale, experimental phase followed by a longer-term, larger-scale mitigation phase. The primary purpose of the experimental phase (completed in December 2004) was to determine the substrate types and bottom coverages that best provide: (1) adequate conditions for giant kelp recruitment, growth and reproduction, and (2) adequate conditions for establishing and sustaining other reef-associated biota, including benthic algae, invertebrates and fishes.

Originally the SONGS permit required that the mitigation reef be constructed of quarry rock, and that the rock cover at least two-thirds of the sea floor within the boundary of the mitigation reef. On April 9, 1997 the Commission approved a permit amendment that authorized the Executive Director to change these requirements if the results of the experimental reef indicated that a different coverage of rock or different type of hard substrate would replace a minimum of 150 acres of medium to high density giant kelp and associated kelp forest biota. Thus, a major objective of the experimental artificial reef was to determine whether substrate coverages less than two-thirds and substrate types other than quarry rock (e.g., rubble concrete) can be used to meet the performance standards for the mitigation reef.

In June 1999, the California State Lands Commission certified the Final Program EIR and issued the offshore lease for the experimental reef. The Commission approved the coastal development permit (#E-97-10) and independent monitoring plan in July, the U.S. Army Corps of Engineers issued its permit in August, and the experimental reef was constructed in September 1999.

The experimental reef located off San Clemente, California tested eight different reef designs that varied in substrate composition (quarry rock or rubble concrete), substrate coverage (actual coverage was measured at 42%, 60% and 86%), and presence of transplanted kelp. All eight reef designs were represented as individual 40 m x 40 m modules that were replicated in seven locations (i.e., blocks) for a total of 56 artificial reef modules totaling 22.4 acres.

Independent contract scientists working for the Commission completed the five-year monitoring of the experimental reef in December 2004 and submitted a final report on the findings and recommendations of the experimental phase to the Executive Director on August 1, 2005.¹ These findings and recommendations formed the basis of the Executive Director's decision contained in the September 29, 2005 staff report entitled "Executive Director's Determination for Type and

¹ Reed, D., S. Schroeter, and D. Huang. 2005. Final report on the findings and recommendations of the experimental phase of the SONGS artificial reef mitigation project. Prepared for the California Coastal Commission. Marine Science Institute, University of California, Santa Barbara. 136 pp. This document can be found on the Commission's website at: <http://www.coastal.ca.gov/energy/songs/songs-report-8-1-2005.pdf>

Cover of Hard Substrate for the Mitigation Reef.” In October 2005, the Commission concurred with the Executive Director’s determination.

Review of the Preliminary Mitigation Reef Plan

1. Summary of the Plan

SCE’s preliminary design plan is for the build out of the full mitigation reef. The mitigation reef plan calls for the addition of 127.6 acres of reef construction to the existing 22.4 acres built in September 1999 for the Phase I experimental reef. The project area is located offshore of San Clemente, California, at water depths of approximately 10 to 18 meters (Exhibit 1). The project area is described as an 862-acre parcel leased from the California State Lands Commission located 0.6 miles offshore of the San Clemente beach, between the San Clemente City Pier to the north and San Mateo Point, approximately 2.5 miles to the south.

In April 2006, the State Lands Commission adopted a resolution declaring the SONGS mitigation reef to be named in honor of Dr. Wheeler North. Staff had formerly referred to the experimental reef as the San Clemente Artificial Reef, or SCAR. The SONGS mitigation reef will henceforth be referred to as the Wheeler North Reef located off San Clemente.

The preliminary design creates a 127.6-acre, low-profile, single-layer reef (< 1 m) constructed of quarried boulders and distributed on the benthos in quantities similar to those of the lowest substrate coverage used for the experimental reef project. The design consists of 11 polygons which vary in area from 2.4 to 37.5 acres (Exhibit 2). Four contingency polygons (22.4 acres total) are designed as potential alternative reef construction areas. These alternative sites would be used only if placement of barge anchors in areas with valuable biological resources is required during construction of any of the 11 polygon areas.

The siting of the reef polygon locations relies primarily on the results of multibeam and sub-bottom profiling sonar surveys conducted on the offshore lease site and historical data of kelp canopy coverage off San Clemente during the period 1989-2004. In addition, diver surveys evaluated the biological character of the lease area. The location and design also incorporates information from historical physical and biological data collected during previous studies in the area, the results of experimental reef monitoring between 1999 and 2004 conducted by Commission contract scientists, and comments of the Commission-established Scientific Advisory Panel during meetings between Commission staff and the SCE team.

The reef design achieves the following: (1) locates the final construction site in close proximity to the San Mateo Kelp Bed, (2) avoids hard substrate areas, (3) maintains the integrity of the experimental reef modules, (4) provides for navigation channels, and (5) avoids areas of historical kelp growth as well as areas of special interest to local fisheries.

The reef construction material will consist exclusively of quarried boulders cast upon the appropriate benthic substrate in a single layer deposition at a density of approximately 790 tons

per acre. This quarried construction material will conform to the California Department of Fish and Game material specifications for augmentation of artificial reefs. The reef construction period is estimated at 100 working days.

2. Compliance with the SONGS Permit

Section 2.1 of the SONGS permit requires that SCE submit a preliminary plan describing the location and design of the mitigation reef for the Executive Director's determination that the plan meets the goals set forth in Section 2.2, which states:

The primary goals of the mitigation reef shall be to provide adequate conditions for a community of reef-associated biota similar in composition, diversity and abundance to the San Onofre kelp bed that compensate for the losses incurred by SONGS operations.

Section 2.1 also prescribes that the type of hard substrate and the percent cover of hard substrate proposed in the preliminary plan shall be determined by the Executive Director. As noted above, the Executive Director's determination on substrate was contained in the September 29, 2005 staff report entitled "Executive Director's Determination for Type and Cover of Hard Substrate for the Mitigation Reef." In October 2005, the Commission concurred with the Executive Director's determination, which included the following two criteria.

Type of artificial substrate

The mitigation reef shall be built of quarry rock or rubble concrete having dimensions and specific gravities that are within the range of the rock and concrete boulders used to construct the SONGS experimental artificial reef. The size structure of the material to be used for the mitigation reef may vary from that of the experimental reef provided that the vast majority of material used to construct the mitigation reef are within the size range selected by the sorting procedure used for the experimental reef.

Bottom coverage of artificial substrate

The percent of the bottom covered by quarry rock or rubble concrete on the mitigation reef shall average at least 42%, but no more than 86% (as determined using the uniform point contact method employed by divers during the five-year experimental reef phase). Discrete areas of the mitigation reef may be comprised of substrate that covers less than 42% or more than 86% of the bottom, but the overall average coverage of hard substrate of the 150 acre mitigation reef shall be between 42% and 86%. However, if such areas of low or high coverage are large enough to cause non-compliance with any of the performance standards, then SCE will be required to build a mitigation reef that is larger than the minimum 150 acres.

The staff has worked with SCE during the development of the preliminary plan and has included representatives from the Department of Fish and Game in the planning meetings. The staff generally supports the mitigation reef as proposed in the preliminary plan. The proposed low-lying artificial reef constructed of Catalina quarry rock off the coast of San Clemente is

consistent with the staff's recommendations for the substrate type, coverage, bottom relief, and location. The proposed mitigation reef meets the design criteria determined by the Executive Director, which were established with the intent of meeting the goals specified in Section 2.2 of the permit.

Revisions Needed in the Final Mitigation Reef Plan

There are several specific issues contained in the preliminary plan that will need clarification and resolution prior to approval of the Final Plan and coastal development permit for the mitigation reef. These issues are of two types: (1) documentation of the reef studies done by SCE in support of the proposed design and (2) questions and concerns regarding the construction methods and schedule. These issues were discussed in a staff comment letter to SCE dated July 11, 2006 (Exhibit 3) and are summarized below.

1. Documentation of the reef studies done by SCE in support of the proposed design

General Comments:

Conclusions drawn from the sonar surveys were inadequately supported by data and analyses (Section 2.2.1 of the preliminary plan). Although staff believes the kelp data were sufficient for this evaluation, significant concerns remain regarding the accuracy of sonar data collected by SCE and their usefulness in future decision making, specifically with regards to the verification of as-built conditions. If SCE anticipates using sonar surveys (multi-beam or side scan) to assist in verifying the as-built design of the mitigation reef, then Commission staff must be provided with all relevant sonar and diver calibration data and reports prior to submission of the Final Plan to enable staff to evaluate the usefulness of the sonar methodology.

Specific Comments:

Sonar Surveys

- None of the claims in the Preliminary Plan Design that multi-beam data "allowed for accurate delineation of areas of various hard substrate coverage" and that "the results obtained using multi-beam were comparable to those of previous studies that used side-scan sonar" were supported by documentation. All supporting documents, data and analyses pertaining to the sonar surveys must be supplied to the Commission staff to evaluate whether the multi-beam data can be used to verify the as-built design of the Phase 2 Mitigation reef.

Biological Observations

- Substrate groupings (A, B, C, and D) appear to be based solely on sonar data. No diver-collected data on the coverage of different substrate types were presented in the Preliminary Plan Design. Descriptions of the transects in the report (which appeared to be based on diver observations) showed a very poor match between substrate cover estimated by sonar vs. that observed by divers. Consequently, staff remains unconvinced that the multibeam data will be useful in specifying the bottom characteristics of the lease site.

- The information presented in Table B.1 is insufficient for evaluating the biological resources and the substrate characteristics in the area proposed for construction. The final plan should include analyses that directly link the biological data to the substrate data by transect rather than transect group. The Commission staff will need access to the non-summarized biological data used to create Table B.1 and the substrate data used to estimate the cover of different substrate types on each transect, since no diver-collected substrate data are provided. These data will allow staff to directly match up biological data with the substrate cover data. Such analyses are needed not only to evaluate the suitability of areas planned for the placement of quarry rock, but also to evaluate any potential impacts to existing hard substrate areas that result from activities associated with construction.
- The Preliminary Plan Design reports that red algae were common in substrate Group B, but the methods indicate that red algae were not sampled. The kinds of data collected by divers needs to be more explicitly described in the final plan.

2. Questions and concerns regarding the construction methods and schedule

Specific Comments:

Artificial Reef Design

- The final plan should be accompanied by data files (e.g., GIS maps and layers) that allow the acreages of the polygons to be verified.
- The proposed 7 ± 1 m margin from existing modules and other hard substrate seems to be beyond the limits of the methods used to construct the experimental reef modules. Construction protocols should be the same as those used to construct the low coverage (i.e., 42%) quarry rock modules of the experimental reef. The experimental reef was not built to ± 1 m accuracy. Should SCE decide to implement this higher accuracy in constructing the mitigation reef, then the Final Plan Design should include rationale for this higher accuracy and some proof of concept that the construction methods proposed will indeed achieve the stated accuracy.

Technical Specifications

- The standard by which the build out of the Mitigation Reef will be judged is not tonnage (790 tons/acre), but coverage (i.e., at least 42% but no more than 86% as determined by divers using the uniform point contact method employed in the experimental phase of the SONGS artificial reef project (Reed et al. 2005).

Placement of Materials

- An explanation as to why brick shaped quarry rocks are ideal should be provided.
- The “acceptable boundary” in Figure 4.1 needs to be defined and an explanation as to how it was derived should be provided. The minimum and maximum boundaries in Figure 4-1 show that they are ± 10 feet of the targeted boundary, which differs from the ± 1 m (3.3 feet) accuracy described for placement to the nearest hard substrate.
- SCE wants to reserve the option of selecting the source for materials as part of the project procurement process. It is unclear from the timeline if this will occur after CEQA action.

Such selection needs to occur before CEQA action in order to assess potential for all environmental impacts.

Construction Method

- SCE proposed to finalize the construction method during the contractor procurement cycle, which will occur after submission and approval of the final plan. If a final construction method has not been selected at the time of the Commission's action on the CDP application, then the Commission staff would recommend the inclusion of a special condition requiring that the construction method be selected and approved by the Executive Director prior to issuance of the CDP.

Project Schedule Considerations

- The 3 ft swell criteria for stopping construction appears overly conservative, and if implemented, will cause significant delays in construction. A construction method that can be implemented in at least 4 foot swells will need to be employed for SCE to stay on its proposed schedule. It might be useful for SCE to investigate the swell conditions during the construction of the experimental reef to help provide a criterion based on actual field conditions during construction.

CEQA, the Permitting Process

- SCE's list of agencies that will be part of the CEQA and NEPA review process should include the California Department of Fish and Game.

Project Schedule

- The timeline for the project will need to be adjusted to accommodate the time required for the Commission's review and approval of the preliminary plan and final plan/coastal development permit application.

Next Steps

If the Commission agrees with the Executive Director's determination contained in this report then SCE will develop the final plan and environmental analyses for the mitigation reef. The SONGS permit requires SCE to submit within twelve months of the Executive Director's determination the final mitigation plan in the form of a coastal development permit application. The final plan must specify location, depth, overall hard substrate coverage, size and dispersion of reef materials, and reef relief and must substantially conform to the preliminary plan. While construction is currently proposed to begin in May 2008, SCE hopes to have the entire package ready for submittal within about six months of the Executive Director's determination. The Commission will hold a public hearing to consider the final plan/coastal development permit application for the construction of the full-scale mitigation reef.

Exhibit 1: Project Site

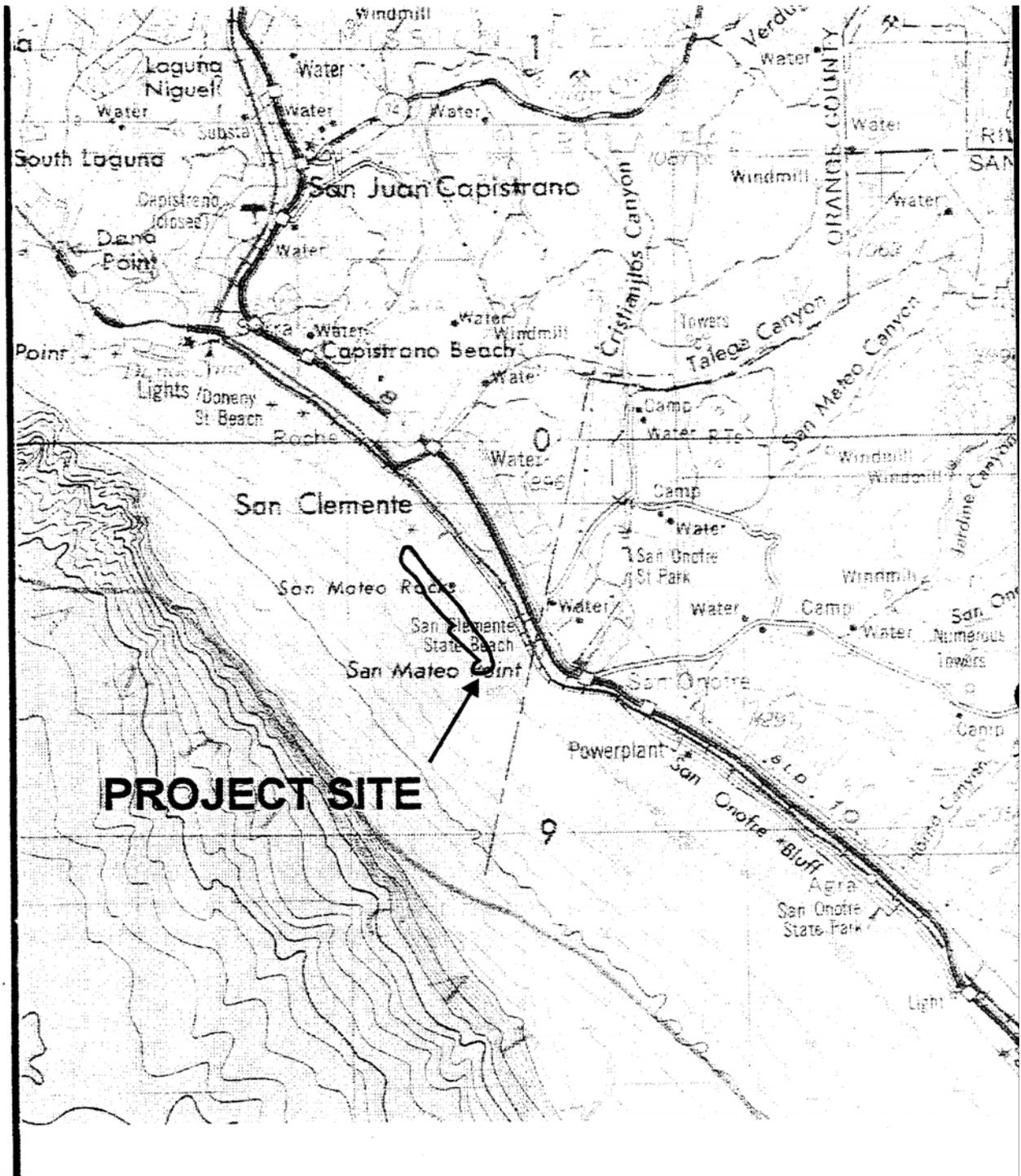
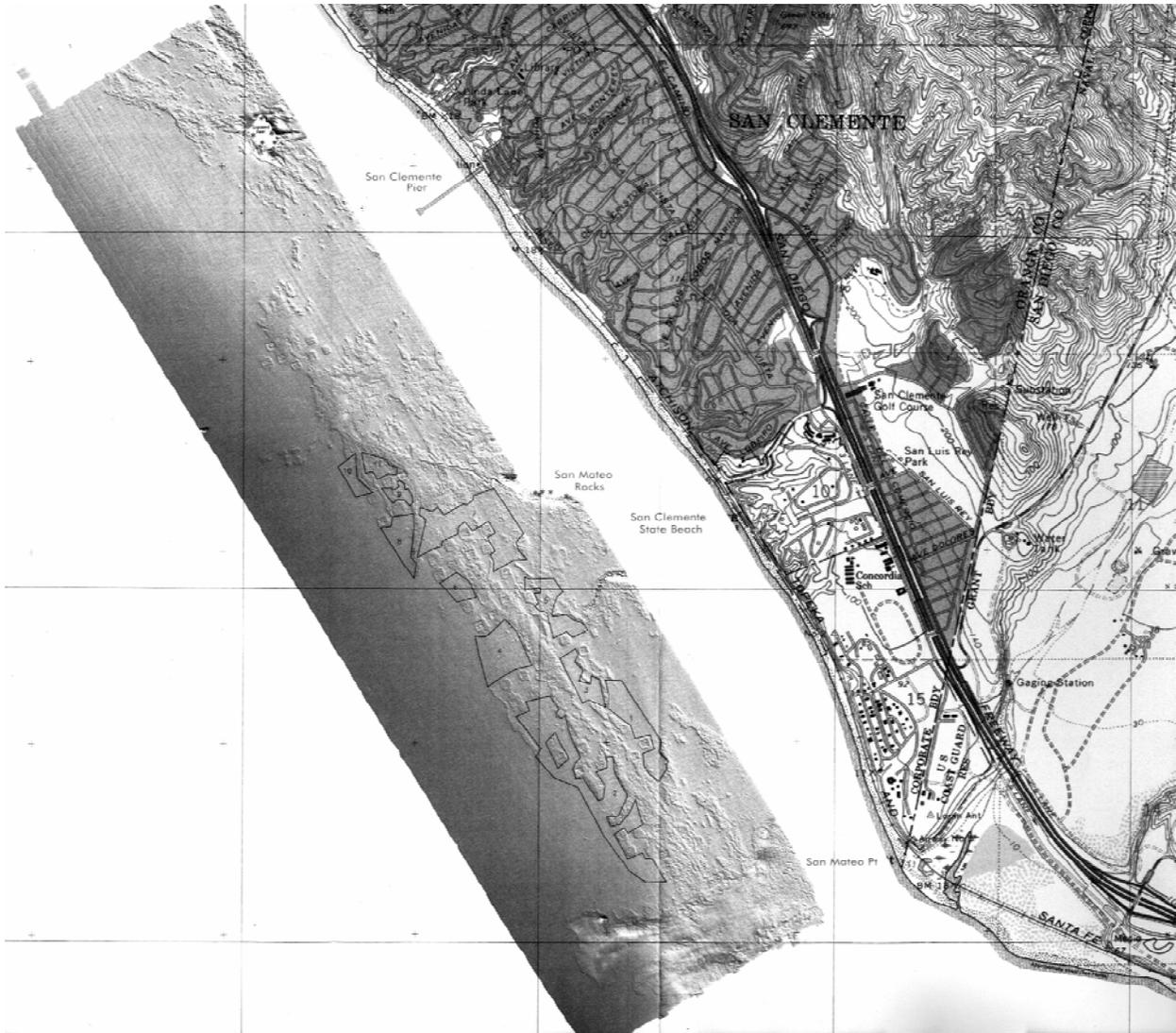


Exhibit 2: Layout of the proposed Wheeler North Reef off San Clemente, CA. Polygons in the offshore inset indicate the locations of the quarry rock modules.



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July 11, 2006

Exhibit 3: Commission Comment Letter to
SCE on Preliminary Reef Plan Design

Mr. Craig Eaker
Southern California Edison
P.O. Box 800
Rosemead, CA 91770

Dear Craig,

We have reviewed the "Preliminary Design Plan for the Wheeler North Reef at San Clemente, California (SONGS Artificial Reef Mitigation Project) Phase 2 Mitigation Reef" dated May 12, 2006 and we are providing you with our comments now to give you sufficient time for review before the Commission acts on the preliminary plan. The comments in this letter will form the basis of our staff report on the preliminary plan. We expect to take the preliminary plan to the Commission at the August meeting for concurrence with the Executive Director's determination that the preliminary plan meets the goals set forth in Section 2.2 of the SONGS permit.

The proposed low-lying artificial reef constructed of Catalina quarry rock off the coast of San Clemente, California is consistent with the Commission staff's recommendations for the substrate type, coverage, bottom relief, and location for the Phase 2 Mitigation Reef. The analyses presented in the preliminary plan's Appendix C, "Kelp Canopy Coverage off San Clemente (from 1989-2004)" provide rather convincing evidence that the proposed construction of the Phase 2 Mitigation Reef will avoid rocky habitat that has resources of significant biological value.

Despite our general support for the preliminary plan, there are several specific issues that will need clarification and resolution prior to approval of the Final Plan and coastal development permit for the Mitigation Reef. These issues are of two types: (1) Documentation of the reef studies done by SCE in support of the proposed design (Section 2.0 in the Preliminary Plan Design), and (2) Questions and concerns regarding the construction methods and schedule. We discuss these issues in greater detail below.

1. Documentation of the reef studies done by SCE in support of the proposed design

General Comments:

Conclusions drawn from the sonar surveys were poorly supported by data and analyses (Section 2.2.1), and hence were of little value to us in analyzing the design plan. The primary rationale given by SCE for using multi-beam instead of side-scanning sonar to evaluate bottom characteristics was that the former would not only provide data on substrate cover, but also on substrate relief. An additional rationale given for using multi-beam sonar was that it could distinguish between desirable (e.g., boulders and cobbles) and undesirable (shell hash and mudstone) types of hard substrate. Aside from graphical representations, no data on substrate relief or on the correlation between relief and percent cover (the basis for siting the location of

the artificial reef) were presented in the Preliminary Plan Design, nor were the pertinent supporting documents provided (e.g., Coastal Environments et al., 2006 a, b). Perhaps more importantly, no calibration data demonstrating the accuracy of sonar estimates of the coverage of different types of bottom substrate were presented. This lack of information was quite surprising in light of the discussions between SCE and Commission staff on methods for diver validation of sonar data. Without such calibration, the staff had no basis for confidence in the description of the seafloor characteristics estimated by sonar and we were forced to rely solely on the long-term kelp canopy coverage data for evaluating the suitability of the polygons proposed for reef construction. Although we believe the kelp data were sufficient for this evaluation, we have significant concerns regarding the accuracy of sonar data collected by SCE and their usefulness in future decision making, specifically with regards to the verification of as-built conditions.

If SCE anticipates using sonar surveys (multi-beam or side scan) to assist in verifying the as-built design of the mitigation reef, then Commission staff must be provided with all relevant sonar and diver calibration data and reports prior to submission of the Final Plan to enable us to evaluate the usefulness of the sonar methodology.

Specific Comments:

2.2.1. Sonar Surveys

- The Preliminary Plan Design claims that multi-beam data “allowed for accurate delineation of areas of various hard substrate coverage” and that “the results obtained using multi-beam were comparable to those of previous studies that used side-scan sonar”. None of these claims were supported by documentation in the Preliminary Plan. All supporting documents (e.g., Coastal Environments et al. 2006a, b as well as EcoSystems Management, 1997, 1999 and Coastal Environments 2005), data and analyses pertaining to the sonar surveys must be supplied to the Commission staff in order for us to evaluate whether the multi-beam data can be used to verify the as-built design of the Phase 2 Mitigation reef.

2.2.2. Biological Observations

- Substrate groupings (A, B, C, and D on pages 6 and 7 and in Appendix B) appear to be based solely on sonar data. Although initial plans and discussions with SCE indicated point-contact estimates of substrate characteristics were to be taken by divers, no diver-collected data on the coverage of different substrate types were presented in the Preliminary Plan Design. Descriptions of the transects in the report (which appeared to be based on diver observations) showed a very poor match between substrate cover estimated by sonar vs. that observed by divers. For example, Group C (classified by sonar as 30-60 % hard substrate) had transects ranging from 100% sand to 70 percent hard substrate (Section 2.22, page 7). Consequently, we remain unconvinced that the multibeam data will be useful in specifying the bottom characteristics of the lease site.
- The information presented in Table B.1 is insufficient for evaluating the biological resources and the substrate characteristics in the area proposed for construction. The final plan should include analyses that directly link the biological data to the substrate data by transect rather than transect group. The Commission staff will need access to the non-summarized biological data used to create Table B.1 and the substrate data used to estimate the cover of different substrate types on each transect. These data will allow us to directly match up biological data with the substrate cover data, rather than rely on

broad substrate groups based on sonar that do not appear to be accurate. Such analyses are needed not only to evaluate the suitability of areas planned for the placement of quarry rock, but also to evaluate any potential impacts to existing hard substrate areas that result from activities associated with construction.

- The Preliminary Plan Design reports that red algae were common in Group B, but the methods indicate that red algae were not sampled. This further adds to the confusion regarding the kinds of data collected by divers, which needs to be more explicitly described in the report.

2. Questions and concerns regarding the construction methods and schedule

Specific Comments:

3.0 Artificial Reef Design

- As noted above, we believe that the kelp overlays on potential reef areas provide good evidence that the proposed polygons for the Phase 2 Mitigation Reef will avoid historical kelp habitat.
- The final plan should be accompanied by data files (e.g., GIS maps and layers) that allow the acreages of the polygons to be verified.
- The proposed 7 ± 1 m margin from existing modules and other hard substrate seems to be beyond the limits of the methods used to construct the experimental reef modules. Our understanding from discussions this year and last summer was that the construction protocols would be the same as those used to construct the low coverage (i.e., 42%) quarry rock modules of the experimental reef. The experimental reef was not built to ± 1 m accuracy. Should SCE decide to implement this higher accuracy in constructing the mitigation reef, then the Final Plan Design should include rationale for this higher accuracy and some proof of concept that the construction methods proposed will indeed achieve the stated accuracy.

4.0 Technical Specifications

- Although the proposed 790 tons/acre correspond to the 312 tons per 1600 m² module, it is important to note that the standard by which the build out of the Mitigation Reef will be judged is not tonnage, but coverage (i.e., at least 42% but no more than 86% as determined by divers using the uniform point contact method employed in the experimental phase of the SONGS artificial reef project (Reed et al. 2005¹).

4.1.4. Placement of Materials

- An explanation as to why brick shaped quarry rocks are ideal should be provided.
- The "acceptable boundary" in Figure 4.1 needs to be defined and an explanation as to how it was derived should be provided. The minimum and maximum boundaries in Figure 4-1 show that they are ± 10 feet of the targeted boundary, which differs from the ± 1 m (3.3 feet) accuracy described for placement to the nearest hard substrate.
- SCE wants to reserve the option of selecting the source for materials as part of the project procurement process. It is unclear from the timeline if this will occur after CEQA action.

¹ Reed, D., S. Schroeter, and D. Huang. 2005. Final report on the findings and recommendations of the experimental phase of the SONGS artificial reef mitigation project. Prepared for the California Coastal Commission. Marine Science Institute, University of California, Santa Barbara. 136 pp

Such selection needs to occur before CEQA action in order to assess potential for all environmental impacts.

5.0. Construction Method

- SCE proposed to finalize the construction method during the contractor procurement cycle, which will occur after submission and approval of the final plan. Because the final plan is to be submitted in the form of a coastal development permit, the Commission may choose to condition the CDP if it believes there is a need to do so. If a final construction method has not been selected at the time of the Commission's action on the CDP, then the Commission staff would recommend the inclusion of a special condition requiring that the construction method be selected and approved by the Executive Director prior to issuance of the CDP.

5.2. Project Schedule Considerations

- The 3 ft swell criteria for stopping construction appears overly conservative, and if implemented, will cause significant delays in construction. For example, data from the Dana Point buoy show that the swell height was > 3 feet on 67% of the days between April 1, 2005 and October 1, 2005 (the time of year when construction will occur). The proposed criteria further limit construction by specifying that each 3 ft swell event will result in a delay of one week. Only 1 of the 26 weeks (4%) during the period April 1, 2005 through October 1, 2005 had swells < 3 feet (see attached figure) suggesting that essentially no work would have been done in 2005 had construction been attempted using the 3 ft swell criteria. A construction method that can be implemented in at least 4 foot swells will need to be employed for SCE to stay on its proposed schedule. It might be useful for SCE to investigate the swell conditions during the construction of the experimental reef to help provide a criterion based on actual field conditions during construction.

6.1 CEQA, the Permitting Process

- SCE's list of agencies that will be part of the CEQA and NEPA review process should include the California Department of Fish and Game. Although CDFG may not have any official permitting responsibilities in this project it has been a very active participant since its inception. We suggest that Dennis Bedford of CDFG be sent a copy of the preliminary plan and all future documents (e.g., the Final Mitigation Plan) to keep him and his agency informed about this project.

7.0 Project Schedule

- The Executive Director has consistently sought concurrence or approval from the Commission on all major decisions pertaining to the SONGS mitigation project, even those specified in the permit as requiring only Executive Director approval. The timeline for the project will need to be adjusted to accommodate the time required for the Commission's review and approval of the preliminary plan and final plan/coastal development permit application. Commission staff expects to take the preliminary plan to the Commission for concurrence with the Executive Director's determination at the August 2006 meeting. Once CEQA/NEPA review has been completed, the final plan will be submitted to the Commission staff in the form of a coastal development permit to be approved by the Commission.

Mr. Craig Eaker
July 11, 2006
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We appreciate your efforts in providing the Preliminary Plan Design for the Phase 2 Mitigation Reef and your willingness to work with us to insure that the Mitigation Reef will meet the goals of SONGS coastal development permit. Providing the data and technical clarifications that we have requested will expedite acceptance and approval of the Final Plan/Coastal Development Permit for the Mitigation Reef and its timely construction.

Sincerely,



Susan M. Hansch
Chief/Deputy Director

cc: David Kay

Histogram showing the proportion of weeks having 0 to 7 days with swell heights > 3 ft (top graph) and > 4 ft (bottom graph). Swell data from the Dana Point buoy for the period April 3, 2005 through October 1, 2005.

